

AMENDMENTS TO THE CLAIMS

Please amend claim 7 as follows. Please add claims 61 and 62.

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1. (Previously Presented) A method for performing a database operation, comprising the computer-implemented steps of:
receiving, at a database server, a database query that specifies an operation for manipulating data;
in response to receiving said database query, the database server executing the query by performing steps that include:
retrieving data from a relational structure;
storing the data in a non-relational structure that can be addressed as a multi-dimensional array; and
performing said operation specified in the database query on said data.
 2. (Original) The method of Claim 1, wherein the step of storing the data in a structure comprises the step of storing the data in a structure that can be symbolically addressed as an n-dimensional array.
 3. (Original) The method of Claim 1, further comprising the step of presenting in tabular format results from performing said operation.
 4. (Original) The method of Claim 1, wherein the step of performing said operation comprises the step of automatically reordering the specified operations to allow the operation to be correctly performed on said data stored in said non-relational structure.
 5. (Original) The method of Claim 1, wherein the step of performing said operation comprises the step of aggregating over a set of data information contained in multiple cells of said non-relational structure.

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1 6. (Original) The method of Claim 1, wherein the step of performing said operation
2 comprises the step of repeatedly performing a series of manipulations on said data until a
3 particular criterion is satisfied.

1 7. (Currently Amended) A method for processing database query operations, comprising the
2 computer-implemented steps of:

3 a database server receiving a database query that:

4 references data in a relational structure as if the data was stored in a multi-
5 dimensional array, and

6 specifies an operation for manipulating data; and

7 in response to receiving said database query the database server executing the query by
8 performing steps that include:

9 retrieving the data from said relational ~~structure~~; structure;

10 performing said operation ~~previously~~ specified in said database query.

1 8. (Previously Presented) The method of Claim 7, wherein:

2 the step of receiving a database query comprises the step of receiving a database query
3 that specifies a multi-dimensional array operation.

1 9. (Original) The method of Claim 7, wherein the step of retrieving the data comprises the
2 step of retrieving the data from one or more relational database tables.

1 10. (Original) The method of Claim 7, further comprising the step of storing said data in a
2 non-relational structure; and

3 wherein the step of performing said operation comprises the step of performing said
4 operation in reference to said data stored in said non-relational structure.

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- 1 11. (Original) The method of Claim 7, wherein the step of performing said operation
2 comprises the step of repeatedly performing a series of manipulations on said data until a
3 particular criteria is satisfied.
- 1 12. (Previously Presented) A method for processing database query operations, comprising
2 the computer-implemented steps of:
3 a database server receiving a database query that specifies an operation for manipulating
4 data; and
5 in response to receiving the database query, the database server performing the steps of:
6 retrieving a first set of data from a first relational structure;
7 storing the first set of data in a non-relational structure; and
8 manipulating the first set of data by performing the operation previously specified in the
9 database query.
- 1 13. (Original) The method of Claim 12, wherein the step of retrieving a first set of data from
2 a first relational structure comprises the step of retrieving said first set of data from a
3 relational database.
- 1 14. (Original) The method of Claim 13, wherein the step of retrieving said first set of data
2 from a relational database comprises the step of retrieving said first set of data from one
3 or more tables within said a relational database.
- 1 15. (Original) The method of Claim 12, wherein the step of storing the first set of data in a
2 non-relational structure comprises the step of storing the first set of data within a
3 spreadsheet application.
- 1 16. (Original) The method of Claim 12, wherein the step of storing the first set of data in a
2 non-relational structure comprises the step of storing the first set of data in a non-
3 relational database application.

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1 17. (Original) The method of Claim 12, wherein the step of storing the first set of data in a
2 non-relational structure comprises the step of storing the first set of data within an n-
3 dimensional array data structure.

1 18. (Previously Presented) The method of Claim 12, wherein the step of manipulating the
2 first set of data comprises the steps of symbolically addressing the first set of data as an
3 n-dimensional array information.

1 19. (Original) The method of Claim 12, further comprising the step of, after performing the
2 step of manipulating the first set of data, storing in a second relational structure, result
3 information based on performance of said operation.

1 20. (Original) The method of Claim 12, wherein the step of manipulating the first set of data
2 comprises the step of repeatedly performing a series of manipulations on said first set of
3 data until a particular criteria is satisfied.

1 21. – 40. (Canceled)

1 41. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 1.

1 42. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 2.

1 43. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 3.

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- 1 44. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 4.
- 1 45. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 5.
- 1 46. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 6.
- 1 47. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 7.
- 1 48. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 8.
- 1 49. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 9.
- 1 50. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 10.
- 1 51. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 11.

B1 1 52. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 12.

1 53. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 13.

1 54. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 14.

1 55. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 15.

1 56. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 16.

1 57. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 17.

1 58. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 18.

1 59. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 19.

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1 60. (Previously Presented) A computer-readable medium carrying one or more sequences of
2 instructions which, when executed by one or more processors, causes the one or more
3 processors to perform the method recited in Claim 20.

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1 61. (New) The method of claim 1, wherein the multi-dimensional array has one or more
2 dimensions that correspond to a column of the relational structure.

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1 62. (New) A computer-readable medium carrying one or more sequences of instructions
2 which, when executed by one or more processors, causes the one or more processors
3 to perform the method recited in Claim 61.

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